

Supplemental Fig.1 Codon optimization of IBDV VP2 protein

	10	20	30	40	50	60	70	80	
IBDV VP2	ATGACAAACCTGCAAGATCAAACCCAACAGATTGTTCCGTTTCATACGGAGCCTTCTGATGCCAACCAACCGGACCGGCGTC								80
Codon optimization IBDV VP2	ATGACCAACCTGCAAGATCAAACCCAACAGATTGTTCCGTTTCATCCGAGCCTGCTGATGCCAACCAACCGGACCGGCGTC								80
IBDV VP2	CATTCCGGACGACACCCTAGAGAAGCACACTCTCAGGTCAGAGACCTCGACCTACAATTTGACTGTGGGGACACAGGGT								160
Codon optimization IBDV VP2	CATTCCGGACGACACCCTGGAGAAGCACACTCTGCGTTCAGAGACCTCACCTACAACCTGACTGTGGGTGACACCGGTT								160
IBDV VP2	CAGGGCTAATTGTCTTTTTCCCTGGTTTCCCTGGCTCAATTGTGGGTGCTCACTACACACTGCAGAGCAATGGGAACTAC								240
Codon optimization IBDV VP2	CAGGGCTAATTGTCTTTTTCCCGGTTTCCCGGGCTCAATTGTGGGTGCTCACTACACCTGCAGAGCAACGGTAACTAC								240
IBDV VP2	AAGTTCGATCAGATGCTCCTGACGGCCAGAACCTACCGGCCAGCTACAACACTGTCAGGCTAGTGAGTCGAAGTCTCAC								320
Codon optimization IBDV VP2	AAGTTCGATCAGATGCTGCTGACGGCCAGAACCTGCGGCCAGCTACAACACTGTCAGGCTAGTGAGTCGAAGTCTCAC								320
IBDV VP2	AGTGAGGTCAAGCACACTCCCTGGTGGCGTTTATGCACTAAATGGCACCATAAACGCCGTGACCTTCCAAGGAAGCCTGA								400
Codon optimization IBDV VP2	AGTGAGGTCAAGCACACTCCCTGGTGGCGTTTATGCACTAAATGGCACCATAAACGCCGTGACCTTCCAAGGAAGCCTGA								400
IBDV VP2	GTGAACTGACAGATGTTAGCTACAATGGGTTGATGTCTGCAACAGCCAAACATCAACGACAAAATCGGGAACGTCCTAGTA								480
Codon optimization IBDV VP2	GTGAACTGACGATGTTAGCTACAAGGTTGATGTCTGCAACAGCCAAACATCAACGACAAAATCGGGAACGTCCTAGTA								480
IBDV VP2	GGGGAAGGGGTAACCGTCCTCAGCTTACCCACATCATATGATCTTGGGTATGTGAGACTCGGTGACCCCATTCGGCTAT								560
Codon optimization IBDV VP2	GGGGAAGGGGTAACCGTCCTCAGCTTACCCACATCATATGATCTTGGGTATGTGAGACTCGGTGACCCCATTCGGCTAT								560
IBDV VP2	AGGGCTCGACCCAAAAATGGTAGCAACATGTGACAGCAGTGACAGGCCAGAGTCTACACCATAACCGCAGCCGATGATT								640
Codon optimization IBDV VP2	AGGGCTCGACCCAAAAATGGTAGCAACATGTGACAGCAGTGACAGGCCAGAGTCTACACCATAACCGCAGCCGATGATT								640

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        650      660      670      680      690      700      710      720
IBDV VP2      ACCAATTCTCATCACAGTACCAAGCAGGTGGAGTAACAATCACACTGTTTCTCAGCTAACATCGATGCCATTACAAGCCTC 720
Codon optimization IBDV VP2  ACCAATTCTCTTCTCAGTACCAAGCAGGTGGTGTAAACATCACCTGTTTCTCTGCTAACATCGATGCCATTACAGCCTG 720

        730      740      750      760      770      780      790      800
IBDV VP2      AGCATCGGGGGGAACTCGTGTTCCAAACAAGCGTCCAAGGCCTTATACTGGGTGCTACCATCTACCTTATAGGCTTTGA 800
Codon optimization IBDV VP2  AGCATCGGTGGTGAAGTGGTGTTCAAACAGCGTCAAGGCCTGATCTGCTGGGTGCTACCATCTACCTGATGGCTTTGA 800

        810      820      830      840      850      860      870      880
IBDV VP2      TGGGACGGCGGTAATTACCAGAGCTGTTGCCGCAGACAATGGGCTAACGGCCGGCACTGACAACCTTATGCCATTCAATA 880
Codon optimization IBDV VP2  TGGTACCGCGGTAATTACCCTGTGCTGTTGCCGCAGACAACGGTCTGACCGCCGGCACTGACAACCTGATGCCATTCAACA 880

        890      900      910      920      930      940      950      960
IBDV VP2      TTGTGATTCCAACCAGCGAGATAACCCAGCCAATCACATCCATCAAACCTGGAGATAGTGACATCCAAAAGTGGTGGTCAG 960
Codon optimization IBDV VP2  TTGTGATACCAACCAGCGAGATCACCCAGCCAATCACCTCCATCAAACCTGGAGATGTGACCTCCAAATCTGGTGGTCAG 960

        970      980      990      1000     1010     1020     1030     1040
IBDV VP2      GCGGGGGATCAGATGTCATGGTCAGCTAGTGGGAGCCTAGCAGTGACGATCCACGGTGGCAACTATCCAGGGGCCCTCCG 1040
Codon optimization IBDV VP2  GCGGGTGATCAGATGTCATTGGTCTGCTTCGGTAGCCTGGCAGTGACCATCCACGGTGGCAACTATCCAGGTGCCCTCCG 1040

        1050     1060     1070     1080     1090     1100     1110     1120
IBDV VP2      TCCCGTCACACTAGTGGCCTACGAAAGAGTGGCAACAGGATCTGTGCTTACGGTTCGCCGGGGTGAGCAACTTCGAGCTGA 1120
Codon optimization IBDV VP2  TCCCGTACCTCTGGTGGCCTACGAACCTGTGGCAACGGTCTCTGTGTTACCGTGGCCGGTGTGAGCAACTTCGAGCTGA 1120

        1130     1140     1150     1160     1170     1180     1190     1200
IBDV VP2      TCCCAAATCCTGAACTAGCAAAGAACCTGGTCACAGAATACGGCCGATTTGACCCAGGAGCCATGAACTACACAAAATTG 1200
Codon optimization IBDV VP2  TCCCAAACCCGAACTGCAAAGAACCTGGTACCGAATACGGCCGTTTGACCCAGGTGCCATGAACTACACAAAATG 1200

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		1210	1220	1230	1240	1250	1260	1270	1280						
IBDV VP2		ATACTGAGTGAGAGGGACCGTCTTGGCATCAAGACCGTCTGGCCTACAAGGGAGTACACAGACTTTCGCGAGTACTTCAT								1280					
Codon optimization	IBDV VP2	AT	CCTG	TCTGAG	CGT	GACCGTCT	GGCAT	AAAGACCGTCTGGCC	SAC	CAG	A	GAGTACAC	CGACTTTCGCGAGTACTTCAT	1280	
		1290	1300	1310	1320	1330	1340	1350							
IBDV VP2		GGAGGTGGCCGACCTCAACTCTCCCCTGAAAATTGCAGGAGCATTGGCTTCAAAGACATAATCCGGGCCCTAAGGTAA								1359					
Codon optimization	IBDV VP2	GGAGGTGGCCGACCT	G	AACTCTCC	G	CTGAAAATTGCAGG	G	GCATTGGCTTCAAAGACAT	G	ATCCG	T	GCCCT	GCG	TAA	1359